Before the
Federal Communications Commission
Washington, D. C. 20554

In the Matter of	)	
	)	
Improving Public Safety	)	
Communications in the 800 MHz Band	)	WT Docket No. 02-55
	)	
Consolidating the 900 MHz	)	
Industrial/Land Transportation and	)	
Business Pool Channels	)	

COMMENTS OF THE CITY OF AUSTIN, TEXAS,
TO THE NOTICE OF PROPOSED RULE MAKING

1. The City of Austin, Texas, along with a number of other local government partners, is constructing a multi-site, 100 channel trunked voice radio system using 821 MHz NPSPAC frequencies.

2. The City of Austin, Texas, is concerned about the possibility of harmful interference to its radio system. We welcome the opportunity to comment on certain issues in this proceeding.

3. First, the City of Austin, Texas, agrees with the Commission's conclusion that the interference problem between certain CMRS systems and public safety systems at 800 MHz is likely to get worse unless corrective action is taken.

4. The City of Austin, Texas, believes that the predominant root cause of the interference problem is the interleaved channel mix of cellular architecture CMRS systems with the traditional noise-limited systems typically used by public safety and most business and industrial/land transportation users of 800 MHz. The only effective solution lies in separating the interleaved cellular architecture systems from the noise-limited systems by a significant amount of spectrum.

5. The reported proposal from Cingular Wireless[1] to move all public safety users to the 700 MHz spectrum (including newly allocated spectrum at TV channels 60-62 and 65-67) would certainly be effective, but at a cost and level of logistical difficulty that the City of Austin, Texas, believes will be prohibitive. In addition, this would provide no relief for the Business and Industrial/Land

Transportation licensees who are also receiving interference from the interleaved cellular architecture systems.

6. Alternatively, the City of Austin, Texas, believes that the Commission's suggestion[2] to move present and future cellular architecture systems from interleaved frequencies to spectrum above 1 GHz would not only be substantially effective, but also be logistically simple, and, if the costs were borne by the cellular architecture licensees, fair.

7. Such a solution is logistically simple because all of the new infrastructure and subscriber equipment only needs to be provided for a small number of entities, each of which has an easily identified subscriber base. The cost of making the move does not have to be allocated between numerous public safety entities, and funds do not need to be transferred from Nextel or any other licensee to anyone else.

8. It is fair because it is consistent with the Commission's longstanding principle that the last party contributing to causing interference is responsible for curing that interference.

9. Additionally, it provides a partial solution to the Commission's search for additional public safety spectrum by allowing the interleaved frequencies vacated by the cellular architecture systems to be reallocated to public safety.

10. This solution also provides Nextel (as the largest cellular architecture licensee on interleaved frequencies) with spectrum that it obviously desires as compensation for the loss of its 800 MHz frequencies and the cost of replacing its infrastructure and subscriber units.

11. In summation, this solution satisfies the Commission's stated goals in this proceeding[3] by removing the predominant root cause of the interference to public safety systems while relocating only a few licensees (thus causing minimal disruption to the licensing structure) and simultaneously providing additional, useful spectrum for critical public safety needs.

12. Having made this recommendation, however, the City of Austin, Texas, recognizes that the Commission may instead choose to move existing public safety licensees within the 800 MHz spectrum. If this were to occur, the City of Austin, Texas, notes that any mass relocation of licensees from the NPSPAC frequencies (821-824/866-869 MHz) needs to be made with all relative frequency and geographic location relationships kept intact. This is essential to preserve the co-channel and adjacent channel relationships resulting from many years of successful frequency coordination that prevent harmful interference between public safety licensees.

13. The City of Austin, Texas, also notes that increasing existing public safety signal levels to overcome interference from cellular architecture systems, as suggested in the Notice[4], would also destroy the co-channel and adjacent channel interference relationships between existing public safety licensees.

14. Finally, the City of Austin, Texas, notes that both proposals from Nextel and the National Association of Manufacturers can be enhanced by inverting the base and subscriber unit transmit and receive bands for all cellular architecture systems. This would modify the Nextel proposal, for instance, to have cellular architecture base stations transmit in 816-824 MHz, and cellular architecture subscriber units transmit in 861-869 MHz; while public safety base stations would transmit in 851-861 MHz, and public safety subscriber units would transmit in 806-816 MHz. With this inversion, public safety portable and mobile receivers listening at 856 MHz would have 36 MHz separation from cellular architecture base transmitters operating at 820 MHz. Under the Nextel proposal, the separation would only be 9 MHz.

Respectfully submitted,

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[1] *See* Cingular Floats Moving Public Safety to 60-69, *RCR Wireless News,* April 1,2002, at page 1

[2] *See* Improving Public Safety Communications in the 800 MHz Band, Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels, WT Docket No. 02-55, *Notice of Proposed Rule Making,* FCC 02-81, Released March 15, 2002, at paragraph 27

[3] *See id.* at paragraph 2

[4] *See id.* at paragraph 76